MAHIM JAIN

NIH-Oxford Scholar 2005

Degree: University of Notre Dame: B.S., Biochemistry, 2002

Research Area: Genetics and Human Genome, Developmental Biology/Reproduction Epidemiology/Population Studies



Mahim Jain earned a Bachelor of Sciences in Biochemistry summa cum laud from The University of Notre Dame in 2002. He was inducted into Phi Beta Kappa, was awarded a 2002 Arnold and Mabel Beckman Foundation Scholarship and was the American Institute of Chemists Outstanding Biochemistry Student. He then matriculated to Indiana University School of Medicine where he again demonstrated superior academic performance garnering an Indiana University Department of Physiology Research Award. After 2 years of medical school, he was awarded a prestigious Howard Hughes Medical Institute-NIH Scholarship to work with Dr. Maximilian Muenke in the National Human Genome Research Institute. He has had several research successes beginning in the Department of Chemical Engineering where he made significant contributions in developing a process to create a novel semiconductor surface using an electro-patterned alumina mold. As an Arnold and Mabel Beckman Foundation Scholar, he spent his junior and senior years working in an organic chemistry lab at Notre Dame studying the physical mechanisms of membrane fusion. This led to 2 co-authored papers describing work toward developing new types of liposomes for better drug delivery. While on a clinical rotation as a medical student he became fascinated by the work of his instructor, Dr. David Weaver on the causes of developmental genetic disorders. While studying clinical cases of genetic defects he made novel observations and published an association between exstrophy of the cloaca and lower limb defects as a first author paper in the American Journal of Medical Genetics. As a Howard Hughes Scholar, he worked to characterize the genetic abnormality in craniosynostosis, Philadelphia type, an acrocephalosyndactyly syndrome. Outside of his research and academic work, Mahim has found time to tutor math and chemistry to high school students. He was also President of the Indian Association of Notre Dame and a leader in the Multicultural Student Affairs organizations. He has been a volunteer docent at the Children's Museum of Indianapolis. Regarding his future, Mahim says," I want to pursue a career studying complex interactions between genes and environment in human developmental disorders since the potential for its clinical application, both preventative and therapeutic, resonates with my desire to directly help patients."